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PERIODICALS

ANNALS OF HUMAN GENETICS

March, 1966, Vol. 29, Part 3.

Taste Thresholds for Phenylthiocarbamide of some Population Groups. III. The thresholds of some groups living in Japan by J. W. H. LUGG.

Data are presented on taste thresholds for PTC in Japanese ethnic groups and it is suggested that their distribution is multimodal, with perhaps five or six modes, rather than bimodal.

Failure to detect linkage between Xg and other X-borne Loci in Sardinians by M. SINISCALCO, G. FILIPPI, B. LATTE, S. PIOMELLI, M. RATTAZZI, J. GAVIN, R. SANGER and R. R. RACE.

Linkage was not detectable between the Xg blood groups and either G6PD deficiency or deutan or protan colour blindness. It is suggested that the locus for Xg is not within practical measurable distance of the latter loci.

An Investigation of so-called X-linked Errors on the Ishihara Plates by A. E. KRILL, J. E. BOWMAN and A. SCHNEIDERMAN.

It is suggested that subjects who make errors on the Ishihara plates but who are normal on other colour-vision tests are in fact normal.

Heterozygotes for Cystinuria by J. C. CRAWHALL, E. P. SAUNDERS and C. J. THOMPSON.

Biochemical studies on heterozygotes for cystinuria are reported and discussed.

A Study of Maternal Age in Down's Syndrome by H. O. AKESSON and H. FORSSMAN.

Statistical examination of the maternal age distribution of mongols suggests that about one-third of them belong to the age-independent class.

A Note on the Estimation of Gene Frequencies by Maximum Likelihood in Systems similar to Rhesus by C. CANNINGS and C. A. B. SMITH.

It can be shown that, in the absence of recessivity, the frequencies for a particular locus can be found by direct gene counting, disregarding the presence of closely linked loci.

Cytogenetical and Clinical Investigations in Four Subjects with Anomalies of Sexual Development by M. FRACCARO, J. LINDSTEN, H. P. KLINGER, L. TIEPOLO, C. G. BERGSTRAND, K. M. HERRLIN, A. LIVADITIS, M. PEHRSON and K. G. TILLINGER.

A detailed clinical and cytogenetical investigation on four sexually abnormal subjects is fully reported.

The Frequency of Iris Bicolor (segmentary heterochromia) in a School Population by E. S. WEISS and M. L. JANOWER.

Examination of over 7,000 children revealed no cases of iris bicolor among brown-eyed children, but 47 cases among the remaining 4,800 children.

May 1966, Vol. 29, Pt. 4.

Evidence for Linkage between the Transferrin locus (*Tf*) and the Serum Cholinesterase Locus (*E₁*) in Man by ELIZABETH B. ROBSON, I. SUTHERLAND and HARRY HARRIS.

An analysis is presented of six pedigrees in which variants of transferrin and serum cholinesterase are segregating. The loci concerned appear to be linked and to have a recombination fraction of about 0.16 if possible sex differences are ignored.

Sex-ratio Data analysed independently of Family Limitation by A. W. F. EDWARDS.

Renkonen's data on the sex-combinations in human families are re-analysed and the results are discussed.

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Inheritance of Total Number of Triradii on Fingers, Palms and Soles *by* D. P. MUKHERJEE.

The number of triradii on the fingers, palms and soles of a sample of Indian families was counted. The correlation coefficients between relatives were greater for fingers than for palms or soles.

A hitherto Undescribed Chromosome Structural Anomaly in a Mentally Retarded Child *by* FRED J. DILL, T. S. JACOBSON, B. TISCHLER *and* JAMES R. MILLER.

A case is described of a mentally retarded child with a new chromosome anomaly. The origin of the anomaly is discussed.

Effect of Parity on Optimal and Critical Birth Weights *by* KASTURI JAYANT.

The effect of parity on the relationship between birth weight and survival is examined.

Birth Weight and Survival: a Hospital Survey repeated after 15 Years *by* KASTURI JAYANT.

Recent data on the relationship between birth weight and survival are compared with data obtained twenty years previously.

Hereditary Brachydactyly *by* D. HOEFNAGEL *and* P. S. GERALD.

A family with hereditary brachydactyly is described. There was insufficient data to determine whether or not there was linkage with four blood group loci.

Note on Dermatoglyphic Data in a Brachydactylous Family *by* L. S. PENROSE *and* SARAH B. HOLT.

Dermatoglyphic data in a family with brachydactyly are described.

A New Type of Human Haptoglobin, Hp 2-1D *by* J. H. RENWICK *and* HEATHER MARSHALL.

A new haptoglobin phenotype is described in two individuals of an English family.

Familial Transmission of a Translocation between Two Non-homologous large Acrocentric Chromosomes. Clinical, cytogenetic and autoradiographic studies *by* PETREA JACOBSEN, MARGARETA MIKKELSEN, A. FRØLAND *and* ANNALISE DUPONT.

A new type of translocation is described which was transmitted through several generations of a family.

Further Data on the Incidence and Genetics of the Serum Cholinesterase Phenotype C_s+ *by* ELIZABETH B. ROBSON *and* HARRY HARRIS.

Data on the frequency and genetics of the serum cholinesterase phenotype C_s+

 are presented and discussed.

The Direction of the Helix of the Human Umbilical Cord *by* P. MALPAS *and* E. M. SYMONDS.

The helix of the three constituent vessels of the human umbilical cord is left-handed in about 80 per cent of the cases examined.

M. G. BULMER

EUGENICS QUARTERLY

September 1966, Vol. 13, No. 3.

The Disadvantaged Child: A Product of the Culture of Poverty, His Education, and His Life Chances *by* FRANCIS P. PURCELL *and* MAURIE HILLSON.

This paper deplores the wasted talent of the "disadvantaged child" and inquires into the reasons why "The American dream of upward socio-economic mobility and the improvement of one's relative position in life is not realized by large segments of the population".

Mental Health Statistics of the Future *by* MORTON KRAMER.

A very comprehensive paper which attempts to predict types of statistical data that will become available in the next ten to twenty-five years in the mental health field.

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Patterns of Digit Preference and Avoidance in the Age Statistics of Some Recent National Censuses by EDWARD G. STOCKWELL.

Social workers are often given inaccurate answers to questions concerning age; this paper attempts to detect some constancy in the errors.

The Arithmetic of Sterilization in India by S. N. AGARWALA.

This paper goes into calculations "to find out the number of sterilizations which will be required to bring about a given decline in birth rate".

Education and Fertility in the United States by S. MITRA.

A study of the reproductive performance of women for the year 1960 "with education as the principal classificatory variable".

Income, Socioeconomic Status and Fertility in the United States by S. MITRA.

Material for this investigation was obtained from "the one in one thousand sample of the 1960 Census" and the socioeconomic status is based on "a composite score using three variables namely, occupation, education and income". Results appear to confirm facts already well known.

The Relationship Between the Birth Rate and the Death Rate in Stable Populations with the Same Fertility but Different Mortality Schedules by M. L. SRIVASTAVA.

The aim of this distinctly mathematical paper is to "present the above relationship which is empirical and is based on the graphical representation of data" and to suggest possible uses.

The Multiple Bases of Human Adaptability and Achievement: A Species Point of View by BENSON E. GINSBURG and WILLIAM S. LAUGHLIN.

This long article draws attention to the great many questions for which answers will only be attained when the behavioural aspect of mankind is viewed from the angle of the whole species instead of specific ethnic groups. Much behaviour may be found to be convergent and "no population has a monopoly on genetic variation essential to future evolution". An adequate bibliography is appended.

Material Dialectics and Biology Today by I. FROLOV.

The rapid development of biology not only calls for "integrating the efforts of many adjacent sciences" it also calls for changes "in the forms and methods of biological cognition itself". The concept of "organic determinism" is ably developed in the field of the molecular organization of vital systems and the author finally calls for joint efforts of "large teams of philosophers and biologists".

Book Reviews:

The Biological Aspects of Social Problems. J. E. Meade and A. S. Parkes (editors). Plenum Press, New York, 1965.

Papers presented at the Symposium held by the (British) Eugenics Society in October 1964.

Population Problems. (Fifth Edition). Warren S. Thompson and David T. Lewis. McGraw-Hill Book Co., New York, 1965.

A considerably re-written version of this "classic book" first published in 1953.

The Effects of Inbreeding on Japanese Children. W. J. Schull and J. V. Neel. Harper and Row, New York, 1965.

The reviewer states that such an extensive study of inbreeding effects will not be repeated for a long time.

Components of Population Change in Latin America. Clyde V. Kiser (editor). *Milbank Memorial Fund Quarterly*. Oct. 1965, 18, 4.

Report on a Conference on which "the Fund is to be congratulated".

C. W. U.

FROM THE PRESS CUTTINGS

STUDY OF MAN IN THE INTERNATIONAL BIOLOGICAL PROGRAMME

By Professor J. S. WEINER

THE FIVE-YEAR International Biological Programme which begins on July 1 is the biological successor to the International Geophysical Year. It has a dual aim—to further ecological understanding of the earth's biosphere, and to apply this knowledge to improving biological productivity and human welfare.

The strategy of the IBP calls for the 40 or so participating countries to undertake a comparative study of living communities (on the land, in the sea, and in fresh water) under a whole range of contrasting environments, both natural and artificial. In the Human Adaptability Section, such comparative studies will elucidate the ways in which the stresses of different environments—desert, tropical, arctic, mountain, and industrial—can be met.

High-altitude Studies

During the past two years many preliminary investigations have been carried out. Some of the most interesting have been on populations indigenous to high altitude, i.e. those living at 11,000 ft. and over. Much had been learnt before about the respiratory and circulatory adjustments that come into play in temporary visitors, i.e. climbers and their porters. The IBP's programme involves combined genetic, demographic, nutritional, and physiological investigations of communities in nearly all the mountain areas of the world—in the Andes . . . in the Himalaya . . . and in Ethiopia. . . .

Studies carried out in Bhutan, Peru, and Ethiopia in the past two years have yielded significant results. In Ethiopia an expedition supported by the Royal Society made comparative studies on three neighbouring populations living at 5,000 ft., 10,000 ft. and 12,000 ft. respectively. The blood group and demographic data suggest that the populations are probably genetically very similar, so that the differences between them have been acquired physiologically or during development. The highlanders were heavier and their chest dimensions definitely larger in both males and females, as is to be expected as a result of the great increase in respiratory activity and capacity. This is a feature of high-altitude acclimatization found also amongst Bhutanese and Andeans. It was, however, surprising to find that the increase in red cells and haemoglobin appeared to be by no means so marked amongst the African highland population. Whether this is a result of some dietary deficiency or whether it points to a particular local adaptation involving perhaps improved tissue utilization of oxygen, remains for future investigation.

Soviet Experience

In a different context the Soviet medical scientist, Academician Vasily Parin, has claimed that "it is best to select cosmonauts from among people who were born at an altitude of 2,000 to 3,000 metres above sea level. They use less oxygen when doing the same physical work. Resistance to oxygen shortage is approximately 30 per cent greater in the case of highlanders compared to lowland dwellers. Accelerations, which increase the weight of a man eight to ten times over, are endured with less heart exertion."

Adaptation to cold is another adjustment necessary for successful life in high altitudes. In Peru, American investigators have shown that the native Indians are better acclimatized to cold than are newcomers; they maintain the temperature of their bodies, and particularly their hands and feet, at significantly higher levels, especially during sleep.

Another series of multidisciplinary investigations under the IBP is concerned with the ecology of circumpolar peoples. . . . There is also an analogous plan for studying peoples in hot environments in New Guinea, Central Africa, the Kalahari, Sahara, and South America.

Worldwide Survey

A worldwide survey, which has already begun, has as its objective the assessment of physical fitness in a wide variety of population groups. . . . Research is also proceeding on an international scale to determine the laboratory tests most useful in assessing strength, endurance, physical capacity, and respiratory efficiency. . . . In all, more than 40 studies are planned.

Another world survey is concerned with the assessment of growth and development of children in a variety of climatic, nutritional and economic conditions, using standardized methods of measurement. . . .

—*The Times*, 17th March 1967

US INCREASES BIRTH CONTROL AID TO \$20m.

THE UNITED STATES Government has decided to help supply contraceptive devices, especially the pill, to developing countries operating voluntary birth-control programmes.

The decision—previously the authorities only gave advice at relatively high level to foreign health officials—has been taken because Washington feels that more vigorous action now is needed to slow down the world's population "explosion".

An official of the United States Agency for International Development (AID) said today that Congress was to be asked to approve up to \$20m. to be spent on contraceptive production in the 12 months beginning July 1. . . .

The increases are paralleled by bigger use of public funds for birth control by the United States at home. In the past three years the Federal Government has stepped up spending from \$2,300,000 a year to \$25,300,000 this year. In spite of the marriage boom, the United States birthrate has declined about 25 per cent since oral contraceptives went on the market in 1960.

Higher Cost of Pills

Intrauterine devices, like the loop, have not been found as effective in countries like India, and it is the relative higher cost of birth pills that is one reason for AID being now prepared to consider requests from foreign governments either to supply them direct or advance loans for providing local facilities to manufacture them. . . .

A further sensitive aspect is that the Americans, as a white northern "Have" nation, are anxious to avoid giving any opportunity to any Nationalists or Communists in the developing countries to mount propaganda campaigns based on false demographic arguments that bigger populations would strengthen the "Have-not" nations of the world.

—*The Times*, 7th April 1967

ABORTION LAW IN USA

CONDEMNING ABORTION AS an "unspeakable crime", a precedent-setting pastoral letter read at all masses in all Catholic churches in the state yesterday called on Catholics "to do all in your power to prevent direct attacks upon the lives of unborn children".

It marked the first time in the state's history that a pastoral letter signed by the bishops of all eight Catholic dioceses in New York was read from the pulpit.

Although the bishops did not specifically mention it, their letter was clearly aimed at rallying grass-roots opposition to a bill to liberalize the state's abortion law. Hearings on the bill are being held here and in Albany. . . .

—*New York Daily News*, 13th February 1967

RABBI WILLIAM F. ROSENBLUM characterized the opponents of legalized abortion yesterday as "medieval-minded laymen and clerics".

Preaching from the pulpit of Temple Israel, 112 East 75th Street, he told worshippers

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that to keep a child from being born, either because the mother's mental or physical health might be endangered, or because the child will be born defective, is "not a crime against God". . . .

—*New York Times*, 12th February 1967

ATLANTA, FEB. 11—A bill to legalize abortions in cases where a baby would have serious defects appears headed for passage by the Georgia Legislature. Its sponsors are confident the measure would also permit legal abortions where the pregnancy results from rape or incest.

It has been unanimously approved by the Judiciary Committees of the House and Senate as part of a complete revision of Georgia's Criminal Code. The revised code will be presented to the full legislature when other sections are ready.

The new Criminal Code has been developed over a six-year period by a study committee. The committee proposed liberalization of the existing law on abortion, but the provision just approved in the Judiciary Committees goes further than the study committee had suggested.

Sponsors of the legislation say it would place Georgia ahead of about 80 per cent of the nation in liberalizing the requirements for therapeutic abortions.

—*New York Times*, 12th February 1967

LSD MAY INJURE THE UNBORN

HUMAN CELL CULTURES have shown significant changes in the chromosomes as a result of applications of lysergic acid diethylamide (LSD 25), the hallucinatory drug whose "mind-expanding" properties have become a cult.

The chromosomes are those parts of the cell which carry the genetic code. The changes observed in the experiments would be enough to cause mental and physical abnormalities in children.

Dr. Maimon Cohen and two colleagues carried out the experiment at the State University of New York in Buffalo. They have also detected chromosomal changes in a mental patient treated with LSD, but emphasized that they have no evidence of actual genetic damage caused to children of people who had taken the drug. Their report is in the current number of *Science*.

—*The Times*, 21st March 1967

MORAL GEOGRAPHY

FACED WITH THE question of whether advice and aid about contraception should be given to unmarried women, Mr. Kenneth Robinson, Minister of Health, has proposed a characteristically British solution—that the decision should be left to the local authorities.

On the face of it, it is a curious idea that pre-marital unchastity should be officially approved in Yorkshire but not in Essex. No doubt the economists could make use of it to curb such evils as the "drift to the South-east". If facilities for contraception were more widely available in the under-developed regions, migration there might be encouraged; on the other hand, this might encourage illegitimate births in the already over-populated Home Counties.

It is hard to know where the balance of economic advantage lies. In these circumstances, some old-fashioned people may take the view that the chastity of their daughters is a matter of equal importance or unimportance in whatever part of the country they happen to live.

—*Sunday Telegraph*, 26th February 1967

NOW BIRD CONTROL PILLS

BIRTH-CONTROL PILLS hidden in herring have been used in American experiments to try to reduce the seagull population which is menacing aircraft, and to-day the journal *World Medicine* "wonders whether the method could be used to stave off the population explosion of pigeons in major cities of the world where many attempts have been made to deter pigeons from defacing public buildings".

—*Scottish Daily Mail*

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